

WHAT IS CLAIMED IS:

1. An image processing apparatus capable of processing a gradient fill object, comprising:

5 detection means for detecting whether or not an object is a gradient fill object having gradation in one of horizontal and vertical directions;

10 pixel count detection means for detecting the number of pixels which have gradation with defined range and are consecutively present in a direction perpendicular to the direction of gradation detected by said detection means; and

15 replacement means for replacing, in the direction perpendicular to the direction of gradation, pixels in number equal to the number detected by said pixel count detection means with gradation of a start pixel located at a start position of the pixels.

2. The apparatus according to claim 1, wherein said replacement means copies gray level values, obtained by gray level calculation for all pixels of a first row of a gradient fill object having gradation in the horizontal direction, in number equal to the detected number of pixels and replaces pixels of rows next to the first row with the gray level values.

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3. The apparatus according to claim 1,

wherein said replacement means copies gray level values, obtained by gray level calculation for all pixels of a first column of a gradient fill object having gradation in the vertical direction, in number
5 equal to the detected number of pixels and replaces pixels of columns next to the first column with the gray level values.

4. The apparatus according to claim 1,
10 wherein said replacement means divides the pixels which have gradation with defined range and are consecutively present in the same row or same column into a plurality of pixel groups including pixels in an equal number sequentially from the first pixel, and in units of
15 pixel groups belonging to the plurality of pixel groups, replaces gray level values of all pixels belonging to each pixel group with the gray level values of a first pixel belonging to the pixel group.

20 / 5. An image processing method capable of processing a gradient fill object, comprising:

the detection step of detecting whether or not an object is a gradient fill object having gradation in one of horizontal and vertical directions;

25 the pixel count detection step of detecting the number of pixels which have gradation with defined

range and are consecutively present in a direction perpendicular to the direction of gradation detected in the detection step; and

the replacement step of replacing, in the
5 direction perpendicular to the direction of gradation, pixels in number equal to the number detected in the pixel count detection step with gradation of a start pixel located at a start position of the pixels.

10 6. The method according to claim 5, wherein the replacement step comprises copying gray level values, obtained by gray level calculation for all pixels of a first row of a gradient fill object having gradation in the horizontal direction, in number
15 equal to the detected number of pixels and replaces pixels of rows next to the first row with the gray level values.

7. The method according to claim 5,
20 wherein the replacement step comprises copying gray level values, obtained by gray level calculation for all pixels of a first column of a gradient fill object having gradation in the vertical direction, in number equal to the detected number of pixels and replaces
25 pixels of columns next to the first column with the gray level values.

8. The method according to claim 5, wherein the replacement step comprises dividing the pixels which have gradation with defined range and are consecutively present in the same row or same column into a plurality of pixel groups including pixels in an equal number sequentially from the first pixel, and in units of pixel groups belonging to the plurality of pixel groups, replacing gray level values of all pixels belonging to each pixel group with the gray level values of a first pixel belonging to the pixel group.

9. A computer-readable storage memory which stores a control program capable of processing a gradient fill object, said program comprising:

15 a code of the detection step of detecting whether or not an object is a gradient fill object having gradation in one of horizontal and vertical directions;

a code of the pixel count detection step of detecting the number of pixels which have gradation with defined range and are consecutive in a direction perpendicular to the direction of gradation detected in code of the detection step; and

a code of the replacement step of replacing, in the direction perpendicular to the direction of gradation, pixels in number equal to the number detected in the code of the pixel count detection step

